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|           |     |         |      |         |       |        |        |        |       |       |        |
|-----------|-----|---------|------|---------|-------|--------|--------|--------|-------|-------|--------|
| hrIZ      | 60  | ATETLA  | EVPE | HVLRGL  | PEEV  | RLFPSA | VDKT   | RIGWAT | KPI   | LKCKK | FGPFV  |
| rIZ       | 59  | ATETLA  | EVPE | HVLRGL  | PEEV  | RLFPSA | VDKT   | RIGWAT | KPI   | LKCKK | FGPFV  |
| Consensus | 60  | ATETLA  | EVPE | HVLRGL  | PEEV  | RLFPSA | VDKT   | RIGWAT | KPI   | LKCKK | FGPFV  |
| hrIZ      | 120 | PNLWMC  | IDA  | TOPEKGN | WLR   | YVWACS | GEE    | QNLFP  | LEINR |       |        |
| rIZ       | 119 | PNLWMC  | IDA  | TOPEKGN | WLR   | YVWACS | GEE    | QNLFP  | LEINR |       |        |
| Consensus | 120 | PNLWMC  | IDA  | TOPEKGN | WLR   | YVWACS | GEE    | QNLFP  | LEINR |       |        |
| hrIZ      | 180 | APGEELL | VWY  | NGEDN   | PEIAA | AIEEER | ASAR   | SKRSSP | KSR   | GKKKS | ENKN   |
| rIZ       | 179 | APGEELL | VWY  | NGEDN   | PEIAA | AIEEER | ASAR   | SKRSSP | KSR   | GKKKS | ENKN   |
| Consensus | 180 | APGEELL | VWY  | NGEDN   | PEIAA | AIEEER | ASAR   | SKRSSP | KSR   | GKKKS | ENKN   |
| hrIZ      | 240 | KCNKIOD | IOL  | KUSE    | DEFA  | NMR    | SAECPK | ED     | ASA   | EQPA  | IDEV   |
| rIZ       | 239 | KCIRTHP | TOL  | KUSE    | DEFA  | NMR    | SAECPK | ED     | ASA   | EQPA  | IDEV   |
| Consensus | 240 | KCNKIOD | IOL  | KUSE    | DEFA  | NMR    | SAECPK | ED     | ASA   | EQPA  | IDEV   |
| hrIZ      | 300 | CEVND   | CEEE | CEVND   | CEEE  | CEVND  | CEEE   | CEVND  | CEEE  | CEVND | CEEE   |
| rIZ       | 295 | CEVND   | CEEE | CEVND   | CEEE  | CEVND  | CEEE   | CEVND  | CEEE  | CEVND | CEEE   |
| Consensus | 300 | CEVND   | CEEE | CEVND   | CEEE  | CEVND  | CEEE   | CEVND  | CEEE  | CEVND | CEEE   |
| hrIZ      | 360 | KEPEI   | RC   | EXPED   | LL    | EE     | KT     | SE     | ET    | LEDC  | SEVTPA |
| rIZ       | 355 | KEPEI   | RC   | EXPED   | LL    | EE     | KT     | SE     | ET    | LEDC  | SEVTPA |
| Consensus | 360 | KEPEI   | RC   | EXPED   | LL    | EE     | KT     | SE     | ET    | LEDC  | SEVTPA |

FIGURE 1A

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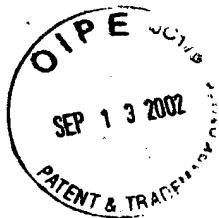
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|           |            |            |            |            |            |            |            |      |          |     |
|-----------|------------|------------|------------|------------|------------|------------|------------|------|----------|-----|
| hr1Z      | PCQHCEKKE  | TKQGLERHMH | IHIST      | NIAF       | KCKYCGK    | FG         | TOINRRRHER | RHE  | GLKR     | 420 |
| r1Z       | PCQHCEKKE  | TKQGLERHMH | IHIST      | NIAF       | KCKYCGK    | FG         | TOINRRRHER | RHE  | GLKR     | 415 |
| Consensus | PCQHCEKKE  | TKQGLERHMH | IHIST      | NIAF       | KCKYCGK    | FG         | TOINRRRHER | RHE  | GLKR     | 420 |
| hr1Z      | STLQSEDL   | ADGKASGENV | SKDSSPP    | LG         | DCLJNS     | EX         | SCDTINS    | S    | VEENCEVK | 480 |
| r1Z       | STLQSEDL   | ADGKASGENV | SKDSSPP    | LG         | DCLJNS     | EX         | SCDTINS    | S    | VEENCEVK | 473 |
| Consensus | STLQSEDL   | ADGKASGENV | SKDSSPP    | LG         | DCLJNS     | EX         | SCDTINS    | S    | VEENCEVK | 480 |
| hr1Z      | ELHPCKYCKK | VFGTHTNMRR | HQRRVHERHL | IPKGVRRKGG | L          | E          | POPPAE     | QA   | QNVV     | 539 |
| r1Z       | ELHPCKYCKK | VFGTHTNMRR | HQRRVHERHL | IPKGVRRKGG | L          | E          | POPPAE     | QA   | QNVV     | 533 |
| Consensus | ELHPCKYCKK | VFGTHTNMRR | HQRRVHERHL | IPKGVRRKGG | L          | E          | POPPAE     | QA   | QNVV     | 540 |
| hr1Z      | PSTEPEEEGE | DDVYIMDIS  | SNISENLNYY | IDGKIQTNN  | TSNCDVIEME | S          | SA         | LYCI |          | 599 |
| r1Z       | PSTEPEEEGE | DDVYIMDIS  | SNISENLNYY | IDGKIQTNN  | TSNCDVIEME | S          | SA         | LYCI |          | 593 |
| Consensus | PSTEPEEEGE | DDVYIMDIS  | SNISENLNYY | IDGKIQTNN  | TSNCDVIEME | S          | SA         | LYCI |          | 600 |
| hr1Z      | CLLTPVTVEI | TONIKITQV  | VTIDLREPL  | QSTNCEKKR  | RTASPP     | LPK        | IK         | ET   | SDPM     | 659 |
| r1Z       | CLLTPVTVEI | TONIKITQV  | VTIDLREPL  | QSTNCEKKR  | RTASPP     | LPK        | IK         | ET   | SDST     | 653 |
| Consensus | CLLTPVTVEI | TONIKITQV  | VTIDLREPL  | QSTNCEKKR  | RTASPP     | LPK        | IK         | ET   | SD..     | 660 |
| hr1Z      | VPSCSLPL   | SIST       | EVSF       | HKEKE      | VYLSS      | KLKQLLOTQD | KLIT       | PAG  | SA       | 719 |
| r1Z       | VPSCSLPL   | SIST       | EVSF       | HKEKE      | VYLSS      | KLKQLLOTQD | KLIT       | PAG  | SA       | 713 |
| Consensus | VPSCSLPL   | SIST       | EVSF       | HKEKE      | VYLSS      | KLKQLLOTQD | KLIT       | PAG  | SA       | 720 |

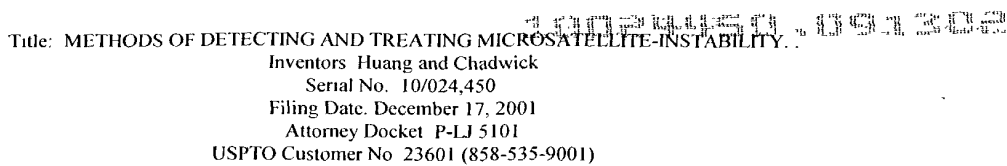
FIGURE 1B





|           |       |        |            |            |            |            |            |            |            |            |      |
|-----------|-------|--------|------------|------------|------------|------------|------------|------------|------------|------------|------|
| hrIZ      | LSA   | SSVVSS | GNLEASLP   | ISFKQEE    | EN         | EGLKPEEPQ  | SAABQVVO   | ETP        | KNF        | CN         | 1138 |
| rIZ       | LSA   | SSVVSS | GNLEASLP   | VTIFKQEE   | ES         | EGLKPEEPQ  | PACQESVVO  | ETP        | KNF        | CN         | 1126 |
| Consensus | LSA   | SSVVSS | GNLEASLP   | FKQEE      | E          | EGLKPE     | AAQVVO     | ETP        | KNF        | CN         | 1140 |
| hrIZ      | VCES  | PFLSIK | DLTKHLS    | HA         | EEWPFKCEFC | VQLFK      | KTDL       | SEHRFLLHGV | GNIFVCSVCK |            | 1198 |
| rIZ       | VCES  | PFLSIK | DLTKHLS    | HA         | EEWPFKCEFC | VQLFK      | KTDL       | SEHRFLLHGV | GNIFVCSVCK |            | 1186 |
| Consensus | VCES  | PFLSIK | DLTKHLS    | HA         | EEWPFKCEFC | VQLFK      | KTDL       | SEHRFLLHGV | GNIFVCSVCK |            | 1200 |
| hrIZ      | KEFA  | FLCNLQ | QHQRDLHPDK | VCTHIEFESG | TLRPQNFTDP | SKA        | VEHMS      | LPET       | PLETSK     |            | 1258 |
| rIZ       | KEFA  | FLCNLQ | QHQRDLHPDE | VCTHIEFESG | TLRPQNFTDP | SKA        | VEHMS      | LPET       | PLETSR     |            | 1246 |
| Consensus | KEFA  | FLCNLQ | QHQRDLHPD  | VCTHIEFESG | TLRPQNFTDP | SKA        | VEHMS      | S          | LPET       | PLETS      | 1260 |
| hrIZ      | EEB   | LNDSS  | ELYTTIKIMA | SGIKTKDPDV | RLGLNQHYPS | FKPPPFQYHH | RNPMGIGVTA |            |            |            | 1318 |
| rIZ       | EEB   | LNDSS  | ELYTTIKIMA | SGIKTKDPDV | RLGLNQHYPS | FKPPPFQYHH | RNPMGIGVTA |            |            |            | 1305 |
| Consensus | EEB   | LNDSS  | ELYTTIKIMA | SGIKTKDPDV | RLGLNQHYPS | FKPPPFQYHH | RNPMGIGVTA |            |            |            | 1320 |
| hrIZ      | TNFT  | THNIPO | TFTTAIRCTK | CGKGVNDNPE | LHKHILACAS | ASDKKRYTPK | KNPVPLKQTV |            |            |            | 1378 |
| rIZ       | TNFT  | THNIPO | TFTTAIRCTK | CGKGVNDNPE | LHKHILACAS | ASDKKRYTPK | KNPVPLKQTV |            |            |            | 1365 |
| Consensus | TNFT  | THNIPO | TFTTAIRCTK | CGKGVNDNPE | LHKHILACAS | ASDKKRYTPK | KNPVPLKQTV |            |            |            | 1380 |
| hrIZ      | QPKNG | VVVL   | NSCKNAFRM  | GQPKRL     | EL         | KMS        | NKL        | KL         | ALKKKNQ    | LVQKATLOKN | 1438 |
| rIZ       | QPKNG | VVVL   | NSCKNAFRM  | GQPKRL     | EL         | KMS        | NKL        | KL         | ALKKKNQ    | LVQKATLOKN | 1425 |
| Consensus | QPKNG | VVVL   | NSCKNAFRM  | GQPKRL     | EL         | KMS        | NKL        | KL         | ALKKKNQ    | LVQKATLOKN | 1440 |

FIGURE 1D



|      |           |             |             |            |            |            |            |
|------|-----------|-------------|-------------|------------|------------|------------|------------|
| 1498 | hrIZ      | KSAKQKADLK  | NACESSSHIC  | PYCIREFTYI | GSLNKHAAFS | CPKKPLSPK  | KVSHSSKKK  |
| 1499 | rIZ       | RAAKQKADLR  | DTSES       | SSSHIC     | PYCIREFTYI | GSLNKHAAFS | CPKKPLSPK  |
| 1500 | Consensus | AKQKADL     | E           | SSSHIC     | PYCIREFTYI | GSLNKHAAFS | CPKKPLSPK  |
| 1558 | hrIZ      | CHSPASSDK   | INSVSNHRRRT | ADAEIKMQSM | QTPLGKTRAR | SECPQVFLP  | SSSFRSQNV  |
| 1545 | rIZ       | CHSPSSSSDR  | INSSECHRRRT | ADAEIKMQST | QTPLGKTRAR | SECPQVFLP  | SSSFRSQNV  |
| 1560 | Consensus | CHSPSSSD    | INSRRRT     | ADAEIKMQS  | QTPLGKTRAR | SECPQVFLP  | SSSFRSQNV  |
| 1618 | hrIZ      | KFAASVKSCK  | SSSSSLRNSS  | PIRMAKITHV | EKKPKAVAK  | NHSAQLSSKT | SRELHVRVQK |
| 1605 | rIZ       | KFAASVKSCK  | SSSSSLRNSS  | PIRMAKITHV | EKKPKAVAK  | NHSAQLSSKS | SRELHVRVQK |
| 1620 | Consensus | KFAASVKSCK  | SSSSSLRNSS  | PIRMAKITHV | EKKPKAVAK  | NHSAQLSSK  | SRELHVRVQK |
| 1678 | hrIZ      | SKAVIQSKET  | LASKRTDRF   | NIKSRSRSGG | PATRSLQLAA | AADLSEMKRE | DISAKQELKD |
| 1665 | rIZ       | SKAVIQSKITA | LASKRTDRF   | NIKSRSRSGG | PATRSLQLAA | AADLSEMKRE | DISAKHELKD |
| 1680 | Consensus | SKAVIQSK    | LASKRTDRF   | NIKSRSRSGG | PATRSLQLAA | AADLSEMKRE | DISAKELKD  |
| 1719 | hrIZ      | FYSYSLRLASR | CSPPAAFYIT  | RCIRKVKALA | AAC        | FOGPPFK    | E          |
| 1707 | rIZ       | FYSYSLRLASR | CSSTAAFYIT  | RCIRKVKALA | AAT        | FOGPPFK    | EK         |
| 1722 | Consensus | FYSYSLRLASR | CSAAFYIT    | RCIRKVKALA | AAT        | FOGPPFK    | E          |

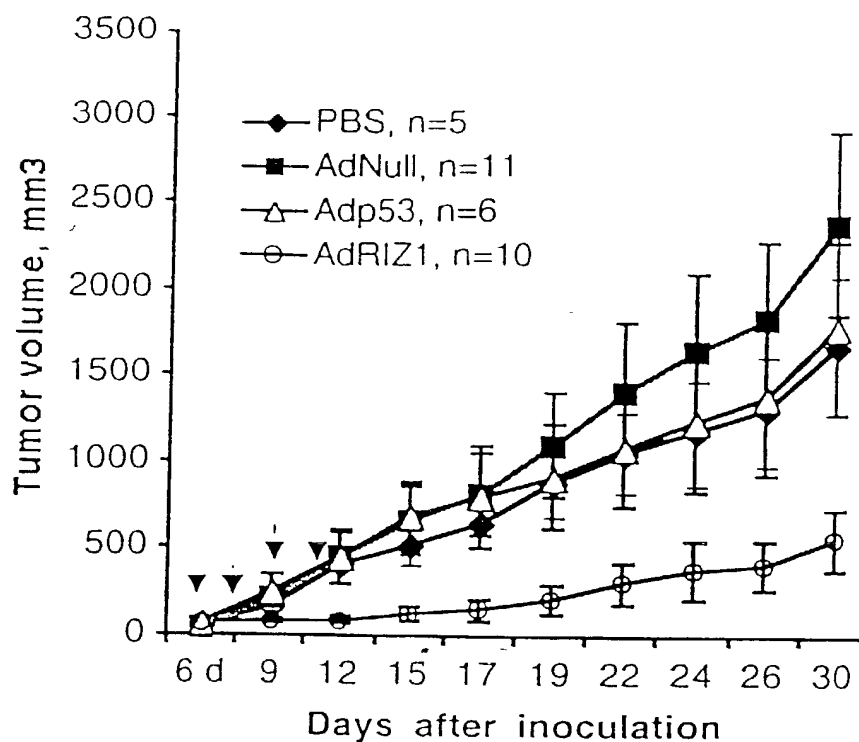


FIGURE 2

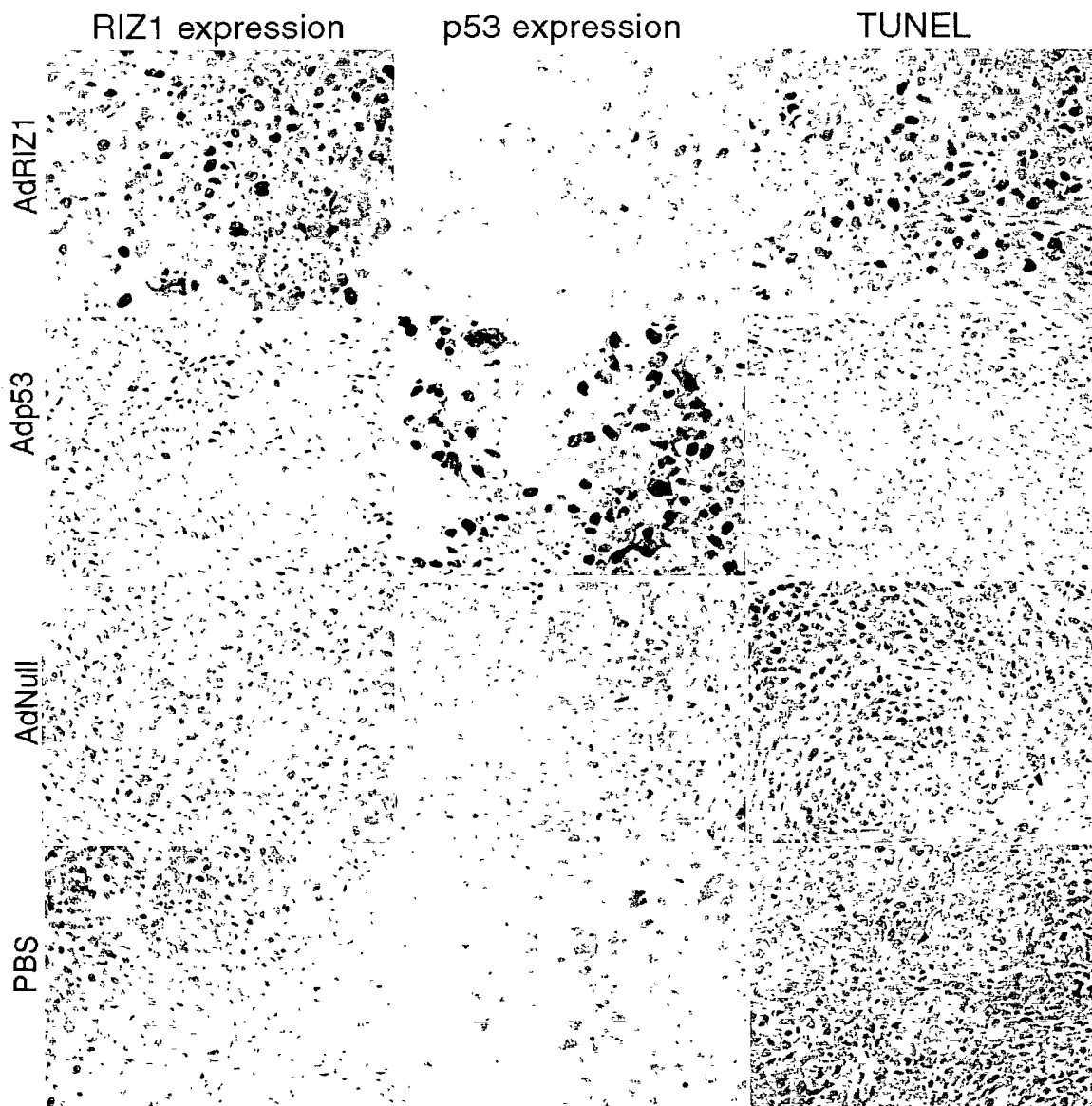


FIGURE 3